## **Supplementary table**

Potential targets of soybean miRNAs identified in the study.

miRNA family <sup>a</sup>	Target <sup>b</sup>	Score
miR169	TC233387 RAPB protein	2.5
	TC220009 HAP-like transcription factor	3.0
	BQ611496	3.0
miR166	BM309730 Homeodomain transcription factor	3.0
	TC221756 Class III homeodomain Zip transcription factor	3.0
	TC230399 Class III homeodomain Zip transcription factor	3.0
miR396	TC231667 annotation not available	3.0
	TC223232 annotation not available	3.5
miR569	TC225608 Resistance protein R8	3.0
	TC225611 Resistance protein R1	3.0
	TC225617 Resistance protein R3	3.0
miR172	BI320499 putative transcription factor	1.5
	TC205405 HAP2B like transcription factor	2.0
	TC208557 annotation not available	2.0
miR164	TC216430 NAC1 domain protein	2.0
	TC218305 NAM-like protein	3.5
	TC221831 NAM-like protein	3.5
miR159	TC233211 ARF-like protein	3.0
	CO984960 annotation not available	4.0
miR168	BG882680 S/T protein kinase	3.5
miR160	TC213894 annotation not available	0.5
	TC208983 ARF10-like protein	1.0
miR156	TC209333 Squamosa promoter binding-like protein	0.0
	TC210466 CBS domain protein	0.0
miR167	CD411229 Annotation not available	0.0
	TC221608 annotation not available	0.5
miR171	CO979466 annotation not available	2.0
	TC217781 Scarecrow-like protein	2.5
miR319	CO984960 annotation not available	0.0
miR393	TC225844 Transport inhibitor response-like protein	2.0
	TC203511 Transport inhibitor response-like protein	2.5
	TC225845 Transport inhibitor response-like protein	2.5
miR-1514	TC208997 annotation not available	1.0
	TC219451 annotation not available	1.0
	TC223409 Plasticity related 2a-like gene	2.0
miR-1508	AW306720 Syringolide-induced protein	4.0
	TC204652 Histone H1	4.0
	TC207519 annotation not available	3.5
miR-1510	TC207788 Resistance protein KR1	3.5
	AW620306 Resistance protein	3.0
	TC223320 Potential resistance protein	4.0

miR-1513	BG790677 annotation not available	3.0
	TC232958 annotation not available	4.0
miR-1507	TC219096 Mycolyl transferase-like protein	3.0
	TC218389 Putative nitrate transporter	3.5
	TC221480 annotation not available	4.0
miR-1509	BI785214 annotation not available	2.0
miR-1512	TC206050 annotation not available	3.0
	TC213545 Myosin-like protein	3.5
	TC217383 Copine-I like protein	3.5
miR-1515	TC222568 annotation not available	4.0
miR-1516	TC224565 Glyceraldehyde-3-phosphate dehydrogenase	3.5
	TC211509	4.5
miR-1518	TC226145 similar to S/T protein kinase	3.5
	TC220660 annotation not available	3.0
miR-1519	TC231879 annotation not available	3.0
miR-1536	TC210530 annotation not available	3.5
miR-1524	BM308243 annotation not available	3.5
miR-1525	AW704761 annotation not available	1.0
	BI699330 annotation not available	2.0
	BU084298 annotation not available	2.0
miR-1530	TC213778 annotation not available	2.0

<sup>&</sup>lt;sup>a</sup> Families for which no target with a score of  $\geq 4.0$  are not listed

## **References:**

Allen, E., Z. Xie, A.M. Gustafson, and J.C. Carrington. 2005. microRNA-directed phasing during trans-acting siRNA biogenesis in plants. *Cell* 121: 207-221.
Schwab, R., J.F. Palatnik, M. Riester, C. Schommer, M. Schmid, and D. Weigel. 2005. Specific effects of microRNAs on the plant transcriptome. *Dev Cell* 8: 517-527.
Zhang, Y. 2005. miRU: an automated plant miRNA target prediction server. *Nucleic Acids Res* 33: W701-704.

<sup>&</sup>lt;sup>b</sup> Target sequences were identified using the miRU on-line utility (Zhang 2005) and manually scored. Sequences are denoted by TC or EST IDs and the annotation from soybean gene index (<a href="http://compbio.dfci.harvard.edu/tgi/cgi-bin/tgi/gimain.pl?gudb=soybean">http://compbio.dfci.harvard.edu/tgi/cgi-bin/tgi/gimain.pl?gudb=soybean</a>).

<sup>&</sup>lt;sup>c</sup> Score is based on criteria developed by Allen et al. (2005). In addition, targets that had a mismatch in the 10<sup>th</sup> or 11<sup>th</sup> nt of miRNA were also excluded (Schwab et al. 2005).